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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:

Chesavage et al.

Serial No.: 09/864,417

Filed: May 23, 2001

For: **SYSTEM AND METHOD FOR  
MAINTAINING A  
DISTRIBUTED OBJECT  
SYSTEM**

Group Art Unit: 2683

TRANSMITTAL LETTER

Mail Stop Appeal Brief  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Enclosed for filing please find Appellant's Appeal Brief in Support of Appellant's Appeal to the Board of Patent Appeals and Interferences. Please charge our Deposit Account No. 17 - 0026 of QUALCOMM Incorporated in the amount of \$500.00 for the filing of the Appeal Brief. In addition, please charge any fees whatsoever which may become properly due or payable, as set forth in 37 CFR 1.16 to 37 CFR 1.18 inclusive, for the entire pendency of this application without specific additional authorization.

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to the Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on:

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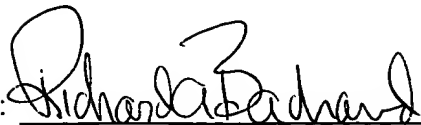
(Signature)

04/10/2006

(Date of Signature)

Respectfully submitted,

Dated: 04/10/2006

By:   
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Docket No. 010337

Serial No. 09/864,417



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**For: SYSTEM AND METHOD FOR  
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**APPELLANT'S BRIEF**

Mail Stop Appeal Brief  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**Attention: Board of Patent Appeals and Interferences**

This following appeal brief is hereby submitted following Appellant's Notice of Appeal, filed on February 9, 2006.

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to the Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on:

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### **REAL PARTY IN INTEREST**

The real party in interest is Qualcomm Incorporated, located at 5775 Morehouse Drive, San Diego, California 92121.

### **RELATED APPEALS AND INTERFERENCES**

There are no other appeals or interferences that will directly affect, be directly affected by, or have a bearing on the Board's decision in this appeal.

### **STATUS OF THE CLAIMS**

1. The total number of claims pending in this application is 23.
2. Claims 1-20, and 26-28 stand rejected
3. Claims 1-20 and 26-28 are on appeal.

### **STATUS OF AMENDMENT**

There have been no amendments filed in the present case after issuance of the Examiner's final action of November 9, 2005.

### **SUMMARY OF CLAIM SUBJECT MATTER**

Claims 1, 14, 18, and 20 are independent claims. There are no means plus function claims. A concise explanation of the subject matter of the independent claims is provided below:

Claim 1: This claim is directed to a system for maintaining data objects distributed on a network, comprising a network controller (200) that transmits a "data object update message" and a corresponding data object update version sequence number (OVSN)" (page 9, lines 37 through page 10, lines 1-13) after receipt of an update message from a wireless communication device (page 9, lines 15-17). The system also comprises a receiver (i.e. wireless communication device) (32) that includes a memory (52) for storing a data object based on the data object update message and corresponding OVSN (page 4, line 38 to page 5, lines 1-2), and a processor (50) for providing a "last received" OVSN in the update request message (page 9, lines 15-19; page 8, lines 2-3).

Claim 14: This claim is directed to a receiver (i.e., wireless communication device) (32) comprising a transceiver (60), a memory (52) for storing a data object based on a data object update message and corresponding OVSN (page 4, line 38 to page 5, lines 1-2) and a processor (50) for providing a “last received” OVSN in the update request message (page 9, lines 15-19, page; page 8, lines 2-3).

Claim 18: This claim is directed to a method of maintaining a distributed object system for the receiver’s perspective, comprising receiving a data object update message with a corresponding data object update version sequence number (OVSN) (page 8, lines 30-34), storing data objects based on the data object update message and OVSAN (page 8, lines 32-36), and transmitting a last received OVSN in any data update request message sent to a network controller (page 9, lines 15-19; page 8, lines 2-3).

Claim 20: This claim is directed to a method of maintaining a distributed object system from a network controller’s perspective, comprising receiving a message from a wireless communication device, the message comprising an OVSN (page 9, lines 15-17), comparing the received OVSN to a local OVSN (page 9, lines 35-37), and transmitting data to the wireless communication device if the received OVSN is not equal to the local OVSN (page 9, lines 37 through page 10, lines 1-13).

### **GROUND OF REJECTION TO BE REVIEWED ON APPEAL**

1. Claims 1-4, 6-7, 9-10, 14-15, 18, 20 and 26-27 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Sakakura (U.S. patent number 6,389,423) and Yamagishi (EP 0 876 029 A2).

### **ARGUMENTS**

#### Rejections under 35 U.S.C § 103(a)

Claims 1-4, 6-7, 9-10, 14-15, 18, 20 and 26-27 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Sakakura (U.S. patent number 6,389,423) and Yamagishi (EP 0 876 029 A2).

In sending macro messages, which minimize the amount of information necessary to be sent, version updates are accounted for by version numbers, e.g., object version sequence numbers (OVSN). Messages, particularly macro updates are dispatched, often wirelessly, to mobile stations or wireless communications transceivers. The mobile station can request a macro update from a network controller (the entity handling such a request) along with sending an indication of its “last received OVSN in the update request message” as recited in claim 1. One import of such an indication is that the network controller can send a proper macro update after receipt of the OVSN. In Sakakura, the failure to include the OVSN in the update request message can add at least one additional delay. By not indicating a message version in a request for an update, additional handshaking is required.

This problem becomes exacerbated in connection with the update of multiple nodes. For instance, once a request for an update is made by a mobile terminal, a response by a base station sending an update which exceeds the version number at the mobile terminal in excess of two or more indicates that prior updates have failed to be received at the mobile terminal. This requires communication of this situation to the base station (a delay) and a subsequent transmission of missed updates from the base station. The foregoing is verified by Sakakura at columns 11, lines 37- 67 and column 12, lines 1-7. It is further exemplified in figures 4, 5, and 8 of Sakakura.

Sakakura is concerned with maintaining data consistency across many nodes, inclusive of mobile terminals and base stations. It is noted at paragraph 0035 of appellant’s specification that the NMC (network controller) may maintain an object database that varies as a function of object and macro version sequence number (an embodiment of an OVSN). Consequently, messages sent via prior macro version can be interpreted in accordance with appellants’ specification. Therefore, even should the macro change for requesting an update, should such a macro be received in a prior version by the network controller, this request can still be interpreted. No such functionality is indicated in Sakakura, so the dispatch of the OVSN in the update request message has little meaning in this instance, since current data, rather than past data, and its synchronization is the focus of Sakakura.

The efficacy and speed associated with aspects of appellants’ invention have been outlined above with evidence in support indicated thereto. One factor in

bringing about this appeal lies in the language of the Office action mailed November 9, 2005. Specifically, it is stated as follows:

“In response to applicant’s argument that the references fail to show certain features of applicant’s invention, it is noted that the features upon which applicant relies (i.e., “Speed”) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed Cir 1993).”

It is believed that *In re Van Geuns*, 988 F.2d 1181 has been misapplied. The fact that the claim limitations give a speed advantage, e.g. claim 1’s recitation of “a processor coupled to the memory and operable to include a last received OVSN in the update request message,” carries with it no obligation to recite “speed” in the claim language, contrary to that indicated in the Office action quote above. The advantages are evident (and expressed herein) from the claim language and demonstrate the utility and nonobviousness of the invention, as claimed, over the cited art

Yamagishi discusses retrieving update data concerning high audience ratings over a broadcast network. As is made clear by applicants’ claim 1, the update request includes a last received object update version sequence number. Assuming, *arguendo*, “Yamagishi teaches a server transmitting a data object update message after receipt of an update request message from a wireless communication device,” (see November 9, 2005 Office action, page 4), this does not amount to including a last received object update version sequence number (OVSN) in the update request message as recited in claim 1. In order to properly combine references, there must be some teaching, suggestion, or inference in the references or knowledge generally available to one of ordinary skill in the art, that would have led one to combine the relevant teachings. Further those combined relevant teachings must yield the invention as claimed. *Ashland Oil, Inc. v. Delta Resins & Refracs., Inc.*, 776 F. 2d 281, 227 USPQ 657 (Fed. Cir. 1985). Since Sakakura in addition to Yamagishi, taken singly, fail to teach or suggest the quoted limitation in claim 1, their combination likewise fails to teach or

suggest, or make obvious this limitation. It is therefore submitted that any combination of Sakakura with Yamagishi would fail to teach, suggest, or make obvious claim 1.

Claims 14, 18, and 20 likewise recite a last received OVSN in an update request message. Specifically, claim 14 recites "a processor ... operable to include the last received OVSN in a data update request message." Claim 18 recites "transmitting the last received OVSN in a subsequent data update request message..." Claim 20 recites "receiving a message from a wireless communications device", the "message comprising an OVSN." For at least the reasons indicated previously, with respect to claim 1, Sakakura in combination with Yamagishi fail to teach, suggest or make obvious claims 14, 18, and 20, especially since their combination fails to teach, suggest or make obvious the noted OVSN and update request message claim limitations.


The remaining claims depend from claims submitted herein as patentably distinguishable over the cited. It is submitted that these dependent claims are likewise patentably distinguishable as they merely contain limitations in addition to the claims from which they depend.

### CONCLUSION

The principles espoused and demonstrated herein have been well established and have been in existence at least since *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966). They remain uncontroverted. For the foregoing reasons, Appellants respectfully request that all presently outstanding rejections be reversed, and that all claims under appeal be allowed.

Dated: 04/10/2006

Respectfully submitted,

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## APPENDIX OF CLAIMS

1. (Previously Presented) A system for maintaining data objects distributed on a network, comprising:

a network controller coupled to the network and operable to enable data communications including the transmission of a data object update message and a corresponding data object update version sequence number ("OVSN") after receipt of an update request message from a wireless communication device; and

a receiver coupled to the network and operable to enable data communications with the network controller, the receiver including a memory for storing a data object based on the data object update message and the OVSN and a processor coupled to the memory and operable to include a last received OVSN in the update request message.

2. (Original) The system of claim 1, wherein the network controller includes a memory for storing the data object based on the data object update message transmitted to the receiver and a corresponding OVSN.

3. (Original) The system of claim 1, wherein the network controller includes a memory for storing the data object based on the data object update message transmitted to a plurality of receivers that includes the receiver and a corresponding OVSN.

4. (Original) The system of claim 2, wherein the network controller is further operable to increment the OVSN for each data object update message transmitted to the receiver.

5. (Original) The system of claim 1, wherein each data object represents an encoded message.

6. (Original) The system of claim 4, wherein the receiver is further operable to include the latest received OVSN in a message to the network controller.

7. (Original) The system of claim 6, wherein the receiver is a wireless communication device and the network is a wireless network.

8. (Original) The system of claim 6, wherein the network controller is further operable to decode the message from the receiver, where the message references a data object and includes the receiver's OVSN.
9. (Original) The system of claim 4, wherein the network controller discards messages from the receiver when the receiver's OVSN is less than the last OVSN sent to the receiver.
10. (Original) The system of claim 9, wherein each data object represents a macro message and has a data object version number.
11. (Original) The system of claim 10, wherein the receiver is further operable to transmit the data object version number to represent the version of the encoded message in a message to the network controller.
12. (Original) The system of claim 11, wherein the network controller is further operable to decode the encoded message based on the data object version number received from said receiver.
13. (Original) The system of claim 11, wherein the network controller is further operable to send data object update messages and corresponding OVSNs to the receiver based on the OVSN included in a message from the receiver.
14. (Previously Presented) A receiver for communicating data signals using a network, comprising:
  - a transceiver coupled to the network and operable to receive data communications;
  - a memory coupled to the transceiver for storing data objects and data object message version sequence numbers (OVSN) transmitted from a network controller in a data communication to the receiver; and
  - a processor coupled to the memory and transceiver and operable to include the last received OVSN in a data update request message to the network controller.
15. (Original) The mobile communications terminal of claim 14, wherein the processor is further operable to include the largest received OVSN in a message to the network controller.

16. (Original) The mobile communications terminal of claim 14, wherein each data object represents an encoded message and has a data object number.

17. (Original) The mobile communications terminal of claim 16, wherein the processor is further operable to use the data object number in a message to the network controller to identify a version of the encoded message.

18. (Previously Presented) A method of maintaining a distributed object system using a network, comprising the steps of:

receiving a data object update message with a data object update version sequence number (OVSN) from a network controller;

storing data objects based on the data object update message and said OVSN;  
and

transmitting the last received OVSN in a subsequent data update request message to a network controller.

19. (Original) The method of claim 18, wherein each of said data objects represent an encoded message and has a data object version number.

20. (Previously Presented) A method of maintaining a distributed object system using a network, comprising the steps of:

receiving a message from a wireless communication device, said message comprising an object version sequence number (OVSN), said OVSN representing a first state of a data object relating to said wireless communication device;

comparing said OVSN with a local OVSN, said local OVSN representing a second state of said data object; and

transmitting updated data to the wireless communication device if said OVSN is not equal to said local OVSN.

21. (Canceled)

22. (Canceled)

23. (Canceled)

24. (Canceled)

- 25. (Canceled)
- 26. (Previously Presented) The method of claim 20, wherein the updated data comprises all data objects.
- 27. (Original) The method of claim 20, wherein the step of comparing said OVSN with said local OVSN is performed at a network controller.
- 28. (Original) The method of claim 20, wherein the step of comparing said OVSN with said local OVSN is performed at a dispatch station.
- 29. (Canceled)
- 30. (Canceled)
- 31. (Canceled)